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# Introduction to Oil & Gas Industry and Sustainable Development



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**Marine Coastal and Delta Sustainability for  
Southeast Asia (MARE)**



- Contains “Introduction to Oil & Gas Industry and Sustainable Development” course materials (for BEng. Petroleum Engineering)
- Site URL: <https://ulearn.utp.edu.my/course/view.php?id=9423>
- Available in English.
- Modules:
  - Announcements
  - Overview
  - Course Syllabus
  - Teaching Methodology
  - Course Materials
  - Lecture Notes
  - Additional Resources
  - Test & Quiz
  - Statistics

# Overview (Disclaimer)



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## WEEK 11 (15 MARCH 2021 - 19 MARCH 2021)

General Description for Week 11 Lesson Plan

### Week 11 (15 March 2021 - 19 March 2021)

Online Lecture on 19 March 2021 (5.00 p.m. - 7.00 p.m.). Attendance are compulsory, MS Teams link : [Click here to join the meeting](#)

Students are required to sign-in their attendance through PowerApps, and answer the Learning Satisfaction Poll for Week 11 (after the lecture).

ONLINE QUIZ 4 via ULearn on Friday 19 March 2021. Link is available from 7.00 p.m. to 10.00 p.m.

Marine Pollution Control and Management\_Jan 2021

These lecture materials are for the Marine Coastal and Delta Sustainability for Southeast Asia (MARE) (Project No. 610327-EPP-1-2019-1-DE-EPPKA2-CBHE-JP).

*This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be made responsible for any use which may be made from the information contained herein.*



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This lecture notes contain topics of the impacts of oil and gas activities on the marine environment, awareness on the effects of hydrocarbon exploration, and an overview of the rules and regulations in marine pollution management.

[Video] 1. What Happens After An Oil Spill ?

The video explains the impacts of oil spill towards the marine ecosystem.

[Video] 2. Oil Pollution in Our Oceans

The video provides an overview of some statistics of oil pollution in the oceans and the effects on the marine environment.



# Course Syllabus



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Dashboard > My courses > PEB1012:Introduction to Oil and Gas Industry and Sustainable Development - January 2021

## 📢 Announcements

### 📖 Course Synopsis

- The course aims to introduce the various aspects of the oil and gas industry and sustainability throughout the life cycle of the industry.
- The topics covered are oil and gas search and discovery, production, processing. For downstream, oil and gas refining into petroleum and petrochemical products and feedstocks are introduced.
- Finally, the course also focuses on principles of sustainable development and the aspects of renewable energy for a sustainable future.
- Topic on Marine Pollution Control and Management is also included in this course.

### 📖 Course Content

1. Oil and Gas Industry Life Cycle
2. Introduction to Oil and Gas Exploration
3. Oil and Gas Recovery Techniques
4. Drilling Operations and Equipment
5. Production Operations and Facilities
6. Downstream Processes
7. Principles of Sustainable Development
8. Current Issues in SD - Poverty, Energy Security and Climate Change
9. Renewable Energy for Sustainable Future
10. Marine Pollution Control & Management

### 📖 Teaching Methodology

Online - Massive Open Online Courses (MOOC) and Guided Learning

1. ULearn – Students are required to do self study / self learning every week (Online via ULearn)
  2. Guided Learning (Online Lecture via MS Teams)
- Course materials will be available for view and download in ULearn on every Mondays of each week. Please refer to ULearn for announcements.

### 📖 IMPORTANT! Students Self Reflection Tool (SSRT) Survey (5 FEBRUARY 2021 - 17 FEBRUARY 2021) - 1st Cycle of Jan 2021 Semester





Announcements

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Course Content

1. Oil and Gas Industry Life Cycle
2. Introduction to Oil and Gas Exploration
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**UTP ULearn**  
Universiti Teknologi PETRONAS Virtual Learning Environment

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The video explains the impacts of oil spill towards the marine ecosystem.

[Video] 2. Oil Pollution in Our Oceans   
The video provides an overview of some statistics of oil pollution in the oceans and the effects on the marine environment.

[Video] 3. How Do We Clean Up Oil Spills?   
The video describes on techniques to clean up oil spills in the ocean, which includes containing the oil spill using booms and dispersing chemicals to remove the oil spills.

[Video] 4. DH Oil Spill Timeline   
The video shows the Deepwater Horizon Oil Spill timeline.

[Video] 5. BP Oil Spill 5 Years Later\_ Wildlife Still Suffering \_ msnbc   
The video presents the effects of the Deepwater Horizon oil spill contamination after five years, towards the environment and the wildlife. It provides awareness to the students on the effects of oil spill in a long term.

- Lecture Notes: Marine Pollution Control and Management
- Video 1: What Happens After an Oil Spill?
- Video 2: Oil Pollution in Our Oceans
- Video 3: How Do We Clean Oil Spills?
- Video 4: DH Oil Spill Timeline
- Video 5: BP Oil Spills 5 Years Later

# Lecture Notes



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UTP

ulearn.utp.edu.my/pluginfile.php/441475/mod\_resource/content/6/Marine%20Pollution%20Control%20and%20Management\_Jan%202021.pdf

PDB1012/PEB1012 Introduction to Oil & Gas Industry and Sust...

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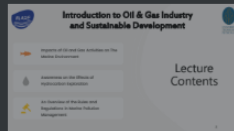
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## PDB1012/PEB1012 Introduction to Oil & Gas Industry and Sustainable Development Marine Pollution Control and Management

1

# Additional Resource



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## Video 1: What Happens After an Oil Spill ?

## Video 2: Oil Pollution in Our Oceans

ulearn.utp.edu.my/mod/resource/view.php?id=201041&forceview=1


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PEB1012/PDB1012: Introduction to Oil and Gas Industry and Sustainable Development - January 2021

Dashboard My courses PEB1012: Introduction to Oil and Gas Industry and Sustainable Development - January 2021 WEEK 11 (15 MARCH 2021 - 19 MARCH 2021)

[Video] 1. What Happens After An Oil Spill ?

[Video] 1. What Happens After An Oil Spill ?



The video explains the impacts of oil spill towards the marine ecosystem.

PREVIOUS ACTIVITY NEXT ACTIVITY

ulearn.utp.edu.my/mod/resource/view.php?id=201043

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PEB1012/PDB1012: Introduction to Oil and Gas Industry and Sustainable Development - January 2021

Dashboard My courses PEB1012: Introduction to Oil and Gas Industry and Sustainable Development - January 2021 WEEK 11 (15 MARCH 2021 - 19 MARCH 2021)

[Video] 2. Oil Pollution in Our Oceans

[Video] 2. Oil Pollution in Our Oceans



The video provides an overview of some statistics of oil pollution in the oceans and the effects on the marine environment.

PREVIOUS ACTIVITY NEXT ACTIVITY



# Test & Quiz



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## Test

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WEEK 12 (22 MARCH 2021 - 26 MARCH 2021)

- General Description for Week 12 Lesson Plan
- Week 12 (22 March 2021 - 26 March 2021)  
**Online Session on Friday 26 March 2021 (5.00 P.M. - 6.00 P.M.) via MS Teams (Compulsory)**  
[Click here to join the meeting](#)
- Course Outcome Survey (COS)  
**Questionnaires for Students (MARE - Marine Pollution Control and Management)**  
**ONLINE TEST 3 on Friday 26 March 2021 (7.00 P.M. - 11.00 P.M.) via ULearn**
- IMPORTANT! Course Outcomes Survey (22 March 2021 - 10 April 2021)
- Questionnaire for Students (MARE - Marine Pollution Control and Management)
- ONLINE TEST 3**  
**Restricted** Available from 26 March 2021, 7:00 PM  
**INSTRUCTION TO CANDIDATES (MCQ)**
  - This **ONLINE TEST** contains **THIRTY (30) Multiple Choice Questions (MCQ) ONLY**
  - Answer **ALL** questions in the timeframe given.
  - Only **SINGLE** attempt for this test is **ALLOWED**
  - EACH** question needs to be **ANSWERED** before proceeding to the **NEXT** one. Going back to the previous question is **NOT ALLOWED**.
  - Attempts must be submitted before time expires, or they are not counted.**

## Quiz

ulearn.utp.edu.my/course/view.php?id=9423

UTP ULearn  
Universal Technology PETRONAS Virtual Learning Environment

The video provides an overview of some statistics of oil pollution in the oceans and the effects on the marine environment.

- [Video] 3. How Do We Clean Up Oil Spills\_  
The video describes on techniques to clean up oil spills in the ocean, which includes containing the oil spill using booms and dispersing chemicals to remove the oil spills.
- [Video] 4. DH Oil Spill Timeline  
The video shows the Deepwater Horizon Oil Spill timeline.
- [Video] 5. BP Oil Spill 5 Years Later\_ Wildlife Still Suffering \_ msnbc  
The video presents the effects of the Deepwater Horizon oil spill contamination after five years, towards the environment and the wildlife. It provides awareness to the students on the effects of oil spill in a long term.
- Learning Satisfaction Poll Week 11 (PDB/PEB1012 - Lecture 19 March 2021)
- Questionnaire for Students (MARE - Marine Pollution Control and Management)  
The questionnaire is circulated among students to seek their feedback on the teaching and learning experience in the course.
- ONLINE QUIZ 4**  
**Restricted** Available from 19 March 2021, 7:00 PM  
**INSTRUCTION TO CANDIDATES (MCQ)**
  - This **ONLINE QUIZ** contains **TEN (10) Multiple Choice Questions (MCQ) ONLY**
  - Answer **ALL** questions in the timeframe given.
  - Only **SINGLE** attempt for this test is **ALLOWED**
  - EACH** question needs to be **ANSWERED** before proceeding to the **NEXT** one. Going back to the previous question is **NOT ALLOWED**.
  - Attempts must be submitted before time expires, or they are not counted.**



## Questionnaires



Anonymous entries (114)

1 2 3 4 5 6 »

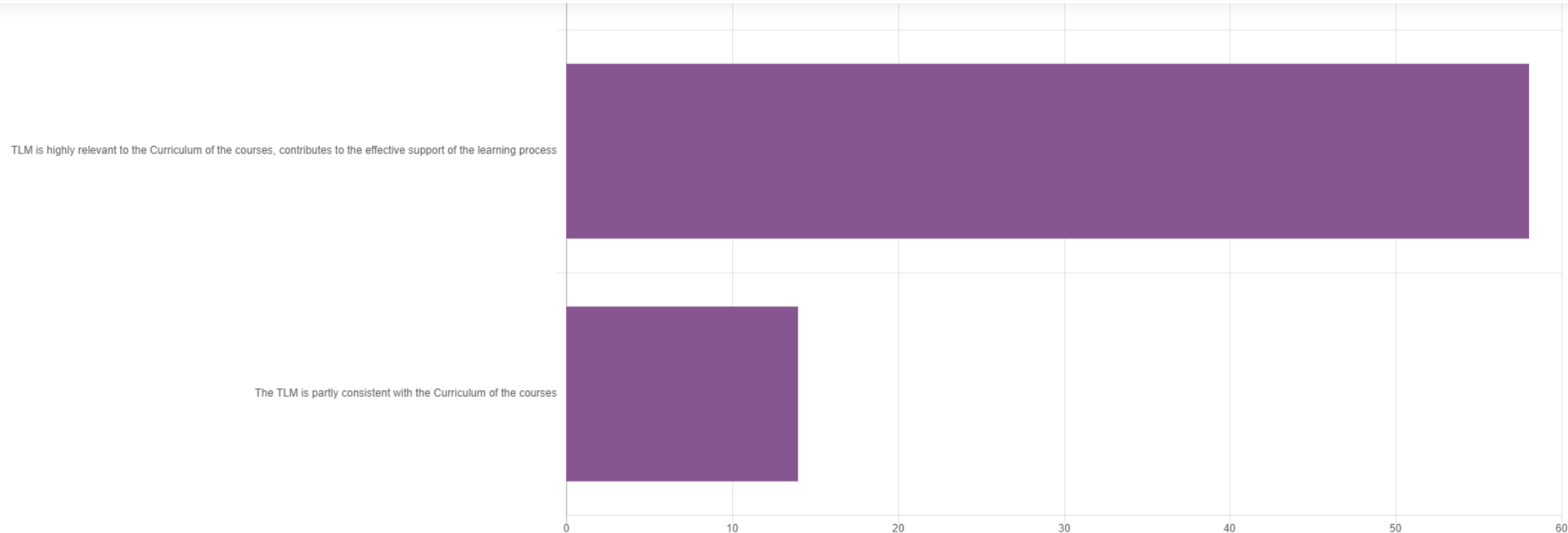
Download table data as

Response number	<a href="#">1. Your overall assessment of the attended IOGISD course. Was the course interesting for you?</a>	<a href="#">2. In your opinion, has the effectiveness of the IOGISD course increased in terms of ...?</a>	<a href="#">3. What aspects of the IOGISD course do you find most useful and interesting in the learning process?</a>	<a href="#">4. How do you evaluate the Teaching and Learning Materials (TLM) that support the IOGISD courses? Do they effectively support the learning process in the basic and special courses?</a>	<a href="#">5. Was your personal level of training sufficient enough to understand the IOGISD course?</a>	<a href="#">6. Does the IOGISD course require improvement in your opinion and in which part?</a>	<a href="#">7. How do you generally assess the usefulness of the developed multimedia modules of the IOGISD course in the ULearn system in general using the MOOC learning model?</a>	<a href="#">8. How do you assess the convenience of navigation within the ULearn system using the MOOC learning model of IOGISD course?</a>	<a href="#">9. How useful do you think the use of video lectures in a MOOC learning model?</a>	
<a href="#">Response number: 1</a>	Good, interesting	Studying sections (modules) of the course devoted to self-study	Availability of feedback from students during the course	TLM is highly relevant to the Curriculum of the courses, contributes to the effective support of the learning process	No, new knowledge was required	No, it does not require.	Multimedia modules in the IOGISD course are very useful for self-study	Navigation is intuitive, helps accelerate the learning process	Remote video lectures are very useful for self-study	
<a href="#">Response number: 2</a>	Good, interesting	Degree of involvement in the learning process	Support for individual learning paths	The TLM is partly consistent with the Curriculum of the courses	Yes, it was	Yes, it requires, in part : Monitoring the progress of students so that doubts on the subjects can be cleared.	The use of multimedia e-learning modules in the IOGISD course does not much differ from studying of traditional textbooks	Navigation is intuitive, helps accelerate the learning process	Remote video lectures are very useful for self-study	
<a href="#">Response number: 3</a>	Good, interesting	Degree of involvement in the learning process	Support for individual learning paths	TLM is highly relevant to the Curriculum of the courses, contributes to the effective support of the learning process	Yes, it was	Yes, it requires, in part : Monitoring the progress of students so that doubts on the subjects can be	Multimedia modules in the IOGISD course are very useful for self-study	The proposed navigation does not affect the acceleration of the learning process of the material	Remote video lectures are very useful for self-study	



## Questionnaires Results

ulearn.utp.edu.my/mod/feedback/analysis.php?id=201247



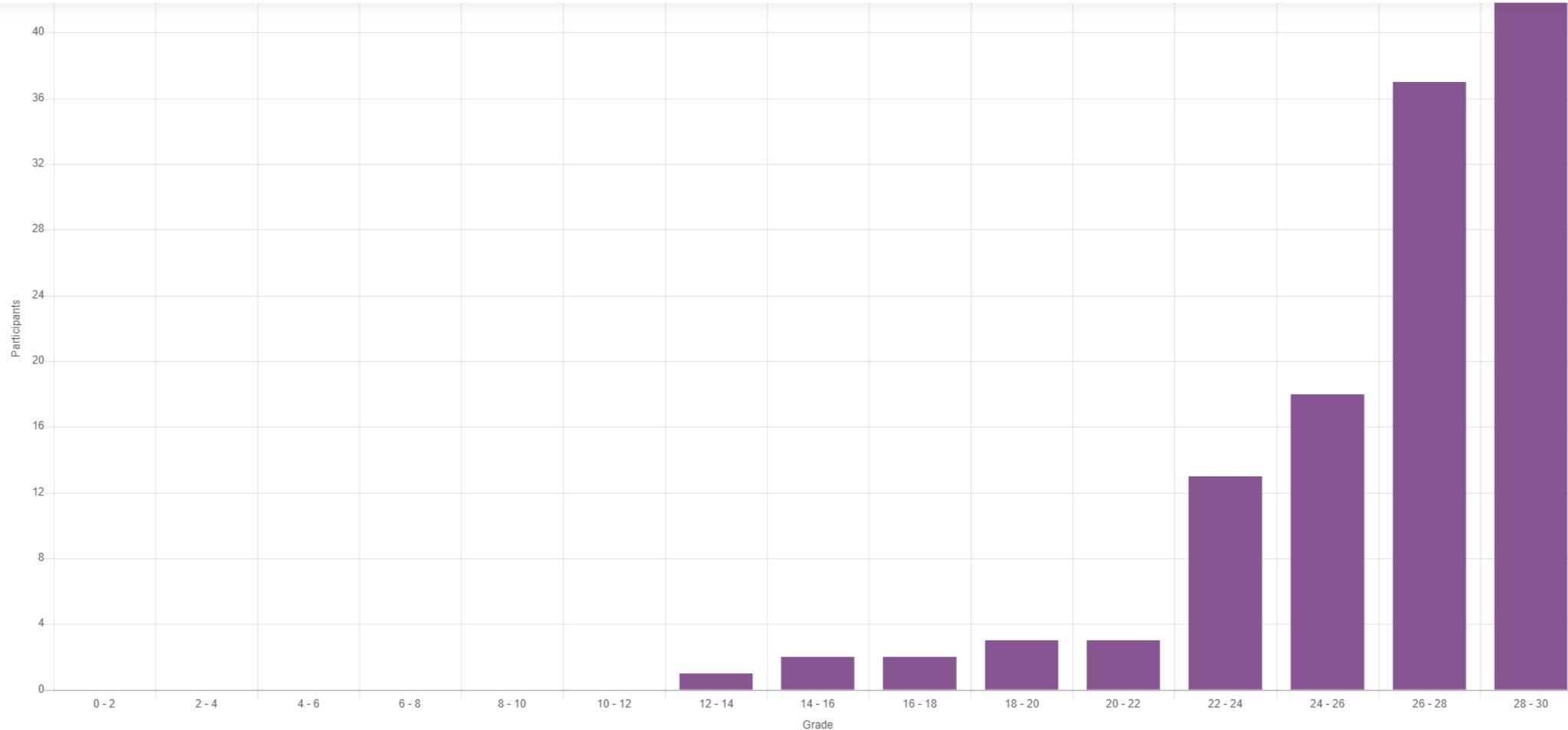
[Hide chart data](#)

	Responses
TLM fully comply with the Curriculum of the courses, contribute to the effective support of the learning process	42 (36.84 %)
TLM is highly relevant to the Curriculum of the courses, contributes to the effective support of the learning process	58 (50.88 %)
The TLM is partly consistent with the Curriculum of the courses	14 (12.28 %)



## Test Results

← → ↻ [ulearn.utp.edu.my/mod/quiz/report.php?id=201237&mode=overview](https://ulearn.utp.edu.my/mod/quiz/report.php?id=201237&mode=overview)



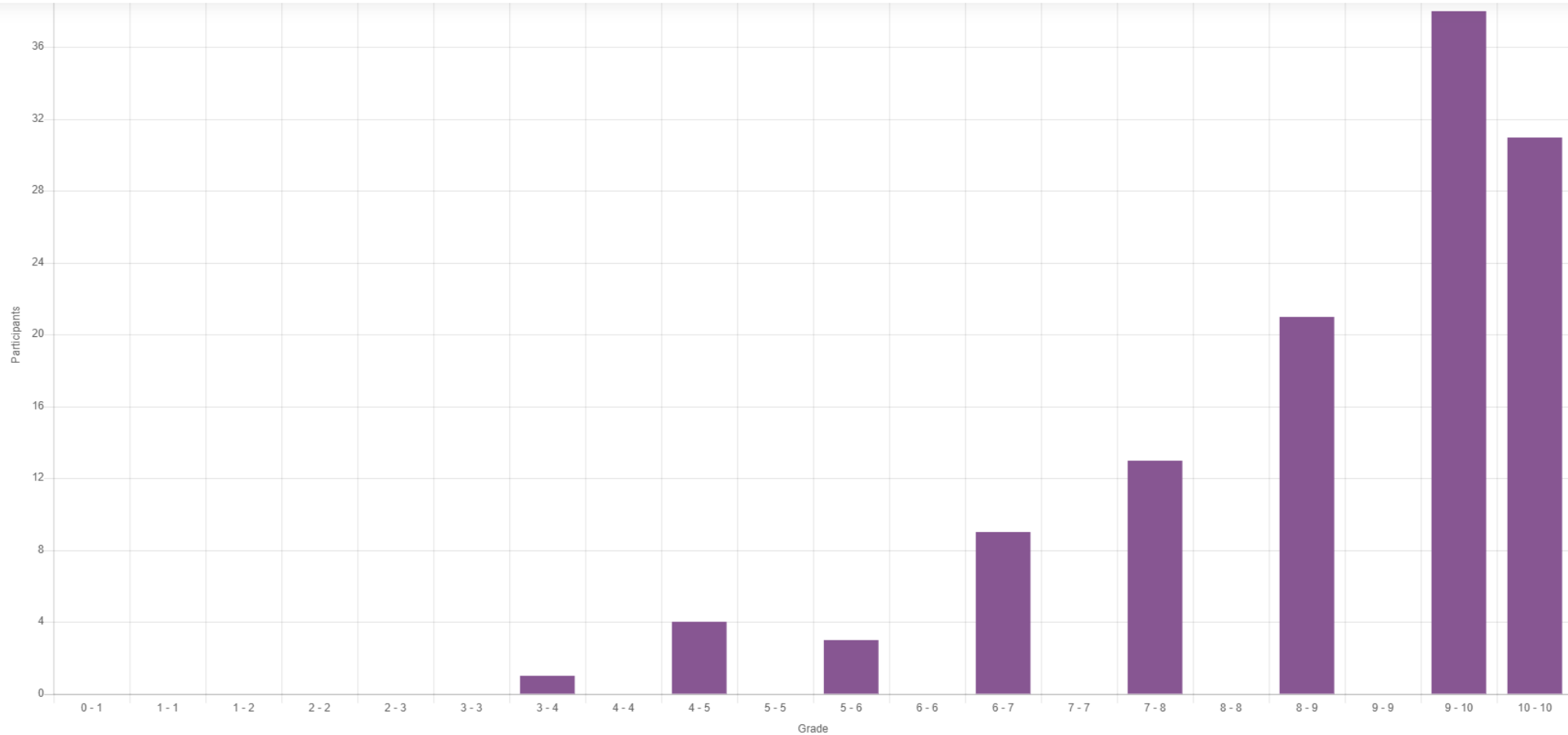
Show chart data





## Quiz Results

ulearn.utp.edu.my/mod/quiz/report.php?id=198741&mode=overview



Show chart data



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